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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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TITLE: METHOD FOR PRODUCING CELL CULTURE SUBSTRATE AND APPARATUS FOR PRODUCING CELL CULTURE SUBSTRATE

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AMENDED ABSTRACT

A main object of the present invention is to provide a new method for producing a cell culture substrate to which cells adhere in a finely processed pattern while retaining the pattern for a long period of time to culture the cells and a production apparatus used in the production method. To achieve the object, the present invention provides a The method for producing a cell culture substrate comprising includes: a patterning substrate forming process of forming a patterning substrate by forming: on a base material, a light shielding portion, and a cell adhesive layer having adhesion to a cell and containing a cell adhesive material which is decomposed or denatured by an action of a photocatalyst upon energy irradiation so as to cover the light shielding portion ; an energy irradiating process of irradiating energy to the patterning substrate from the base material side to form a pattern consisting of: a cell adhesion inhibiting portion in which the cell adhesive material is decomposed or denatured, and a cell adhesion portion which is other than the cell adhesion inhibiting portion; and a cell adhesion process of making the cell adhere to the cell adhesion portion in a cell culture medium containing the cell and a culture medium.